A2500-2

Paper Paperboard & Wood Pulp

MONTHLY STATISTICAL SUMMARY - Vol.68 No.2 FEBRUARY 1990

PAPER AND PAPERBOARD PRODUCTION ENTERING 1990 AT A STEADY PACE

Despite the marked slowdown of total economic growth, paper and paperboard production continued along the high, but level, path it has been following during the past two years. January 1990 output exceeded 6.6 million tons, equivalent to a seasonally adjusted annual rate of 77.4 million tons. This was slightly above its year-ago level, and compares with the 76.5 million tons recorded in 1988 and 1989. Paper and paperboard production did falter in the late weeks of 1989, but much of that weakness can be traced to the extremely cold weather in many paper making-states.

Paper: Paper production posted a 1.6% seasonally adjusted gain in January, compared to year-ago levels. All major grades, except kraft papers, turned in a positive performance.

Some current production trends reflect additional capacity that came on-stream in recent months. Newsprint production, for example, which was nearly 10% above its year-ago level in January 1990, includes tonnages for two new mills that were not in production one year ago. In the printing-writing paper grades, however, capacity expanded less than 2% during the past twelve months, and operating rates are presently fluctuating closely about the 94% level.

Among the other paper grades, tissue paper production remained strong in January 1990, with preliminary data indicating a sizable increase over its year-ago total. Specialty packaging and special industrial papers enjoyed modest production gains, but shipments of unbleached kraft papers moved back to the lower levels of its recent range. However, inventories of kraft paper held by converters were reduced significantly in January. The production and shipments trends for the separate paper grades are graphed on pages 4 and 6.

Paperboard: Paperboard production has also traced a relatively flat trend during the past two years with little evidence of significant changes in levels of inventories in the

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hands of users. The January 1990 production total just matched its year-ago level. Gains in unbleached kraft paperboard, largely the result of a major increase in production destined for export, offset declines in the semichemical and recycled grades.

The paperboard data presented in the table on page 3 have been greatly expanded. The table now includes data on linerboard and corrugating medium by furnish, reflecting the heightened interest in waste paper as a paper-making fiber. The January 1990 recycled linerboard production total was well below its year-ago level, but production of recycled corrugating medium showed a 3.4% gain.

Similarly, the table presents data on folding boxboard production by furnish. Here the January recycled folding boxboard production total is shown to be 6% above its year-ago level, offsetting declines in the solid bleached and unbleached kraft grades.

WASTE PAPER

The increasing interest in waste paper as a fibrous raw material in paper-making is evident in the newly available 1989 data. Total consumption of waste paper at paper and paperboard mills -- including the wet machine board and construction grades* -- was a record-high 20,665,000 tons in 1989, 5% above its 1988 level. This brought the ratio of waste paper consumption to the total production of paper, paperboard, wet machine board, construction paper and insulating board to 26.5%. In 1985 that ratio was 23.8%; in the 15 years before that it held in the 22.8-23.8% range.

Collection of waste paper has also been affected by increases in uses outside the paper industry. Earlier estimates had indicated that about 500,000 tons per year were used for such purposes as molded pulp (about 200,000 tons per year) packaging protection, and insulating. New studies indicate that markets have also developed in use of waste paper as a mulch and as a bedding for animals, raising the estimated total for other uses above 700,000 tons per year.

The fastest growth in waste paper demand, however, has been in exports. In particular, mills in the Far East have been coming into operation depending on waste paper for their fibrous raw material. Waste paper exports in 1989 climbed to a record-high 6.3 million tons, 6% above their 1988 level and 2.6 times the 1979 rate. This total includes 611,000 tons of waste paper exported to Canada in 1989 as reported by the Canadian Pulp and Paper Association, which is about 300,000 tons greater than the figure reported by the U.S. Census Bureau for waste paper exports to Canada.

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*These grades are excluded from the waste paper consumption data at paper and paperboard mills reported in the table on page 5.

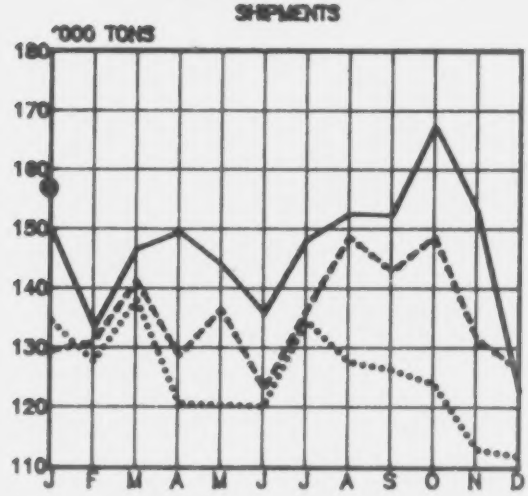
Continued on Page 11

PAPER AND PAPERBOARD STATISTICS PRODUCTION, SHIPMENTS AND ORDERS (Thousands of Tons)	YEAR 1988	YEAR 1989	OCT 1989	NOV 1989	DEC R 1989	JAN P 1990	Annual Rate Y-T-D 1990	% Change From Same Period Last Year
PAPER								
Newsprint – Production	5,982	6,088	526	516	532	556	6,671	9.6
– Shipments	5,969	6,079	526	530	529	548	6,576	13.8
Printing & Writing: Total Shipments	21,857	21,540	1,921	1,816	1,684	1,896	22,777	0.9
Groundwood Paper – Shipments	1,824	1,754	167	153	123	157	1,889	5.3
– New Orders	1,854	1,784	152	129	150	162	1,948	14.8
– Unfilled Orders	208	211	212	196	211	224	2,689	21.2
Coated Papers – Shipments	7,359	7,194	653	616	585	638	7,654	0.6
– New Orders	7,412	7,262	667	552	585	606	7,277	2.9
– Unfilled Orders	751	822	861	832	822	786	9,430	15.9
Unctd Free Sheet – Shipments	11,277	11,043	968	930	884	972	11,662	0.7
– New Orders	11,298	11,132	995	967	914	936	11,234	1.1
– Unfilled Orders	790	784	696	747	784	740	8,879	11.5
Thin Papers – Shipments	281	245	19	17	18	18	213	-4.9
Cotton Fiber Paper – Shipments	167	157	14	12	12	13	160	-2.6
Bleached Bristols – Shipments	1,150	1,148	100	89	82	100	1,200	-0.1
Tissue Paper – Production	5,476	5,636	489	474	460	490	5,882	5.2
Total Packaging & Other Paper	5,047	4,925	437	429	402	414	4,970	-6.4
Unbl. Kraft Paper – Shipments	2,800	2,681	239	241	216	216	2,592	-13.1
Other Paper – Production	2,247	2,243	196	188	186	198	2,378	2.2
TOTAL PAPER PRODUCTION – UNADJUSTED	38,363	38,189	3,373	3,234	3,077	3,358	40,300	1.9
TOTAL PAPER PRODUCTION – SEAS ADJ			3,262	3,247	3,090	3,272	39,267	1.6
PAPERBOARD – PRODUCTION								
Containerboard	26,225	26,425	2,196	2,145	2,160	2,283	27,390	0.9
Cont'bd For Dom Use for Fibre Boxes	23,563	23,742	1,970	1,941	1,906	2,025	24,304	0.2
Total Linerboard	16,177	16,392	1,356	1,339	1,289	1,388	16,650	0.5
Unbleached Kraft	15,801	15,827	1,310	1,299	1,251	1,350	16,198	1.2
Solid Bleached	170	177	13	13	10	13	151	-13.1
Recycled	407	388	33	26	29	25	301	-22.0
Corrugating Medium	7,351	7,335	614	601	617	637	7,643	-0.2
Semichemical	5,528	5,545	458	446	467	478	5,732	-1.3
Recycled	1,823	1,791	156	155	150	159	1,910	3.4
Container Chip and Filler	35	14	1	1	1	1	11	-59.1
Other Containerboard for Dom Use	320	307	25	19	27	23	281	-14.6
Containerboard for Export	2,342	2,377	202	185	227	234	2,806	9.4
Boxboard	11,879	11,873	1,034	981	893	1,002	12,024	-2.2
Boxboard for Packaging for Dom Use	7,014	7,059	588	572	527	607	7,289	-0.4
Folding Boxboard	5,293	5,334	452	437	390	461	5,528	0.3
Solid Bleached	2,017	1,992	164	167	151	163	1,961	-3.5
Unbleached Kraft	924	967	82	74	65	86	1,033	-4.4
Recycled	2,352	2,355	206	196	174	211	2,534	5.8
Set-up Boxboard for Dom Use	279	284	23	22	19	26	314	0.4
Milk Carton & Food Service Dom Use	1,442	1,441	113	112	119	121	1,446	-3.1
Other Boxboard for Domestic Use	4,076	3,963	362	329	291	322	3,862	-7.5
Boxboard for Export	789	852	83	80	74	73	874	7.7
Paperboard Production by Furnish	38,104	38,299	3,230	3,126	3,053	3,285	39,414	-0.1
Unbleached Kraft	19,140	19,493	1,619	1,580	1,567	1,685	20,225	1.7
Semichemical	5,664	5,681	472	455	479	490	5,874	-2.0
Solid Bleached Kraft	4,511	4,532	376	379	368	384	4,613	0.0
Recycled	8,789	8,592	761	713	639	725	8,702	-2.9
Paperboard Production for Export	3,132	3,227	284	265	300	306	3,676	8.9
Unbleached Kraft	2,296	2,373	202	187	224	226	2,713	10.2
Semichemical	136	137	14	9	12	12	142	-24.8
Bleached Kraft	628	683	65	66	60	64	768	12.5
Recycled	72	34	3	4	3	4	53	31.8
TOTAL PAPERBOARD PRODUCTION – UNADJ	38,104	38,299	3,230	3,126	3,053	3,285	39,414	-0.1
TOTAL PAPERBOARD PROD – SEAS ADJ			3,211	3,212	3,119	3,178	38,140	-0.7
PAPER AND PAPERBOARD – UNADJ	76,467	76,488	6,603	6,361	6,130	6,643	79,714	0.9
PAPER AND PAPERBOARD – SEAS ADJ			6,473	6,459	6,209	6,451	77,407	0.4

R – Revised P – Preliminary Seas. Adj. – Seasonally Adjusted Unadj – Not Seasonally Adjusted

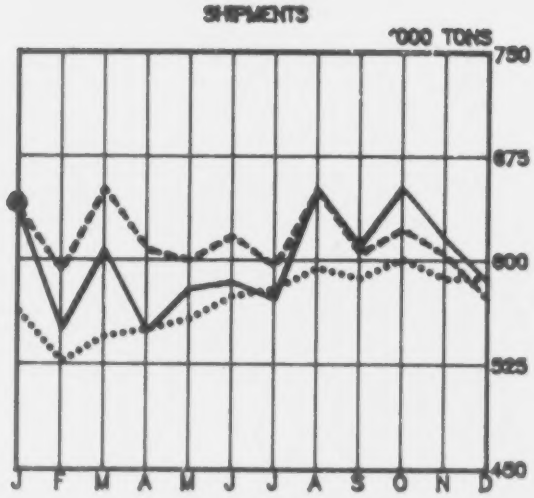
GROUNDWOOD PAPER, UNCOATED

SHIPMENTS



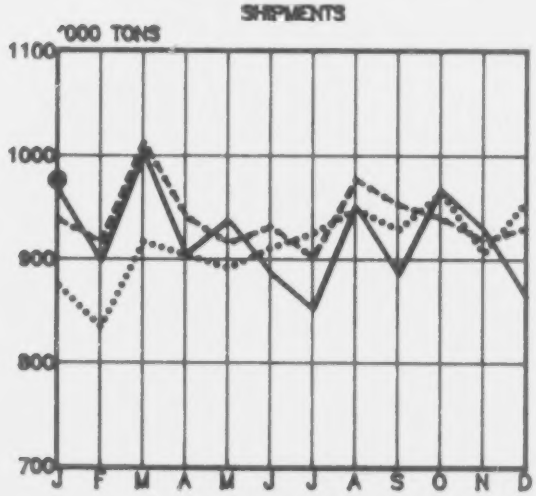
COATED PAPER

SHIPMENTS



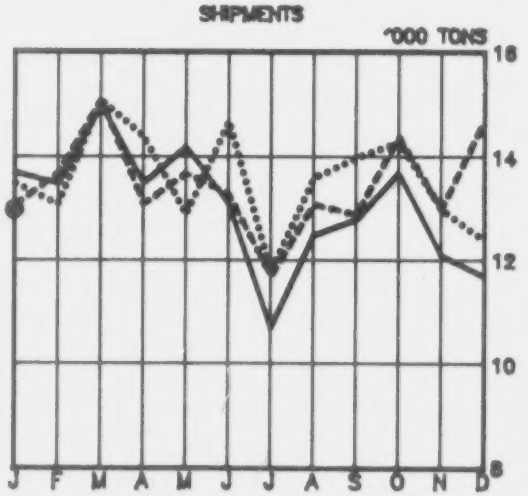
UNCOATED FREE SHEET PAPERS

SHIPMENTS



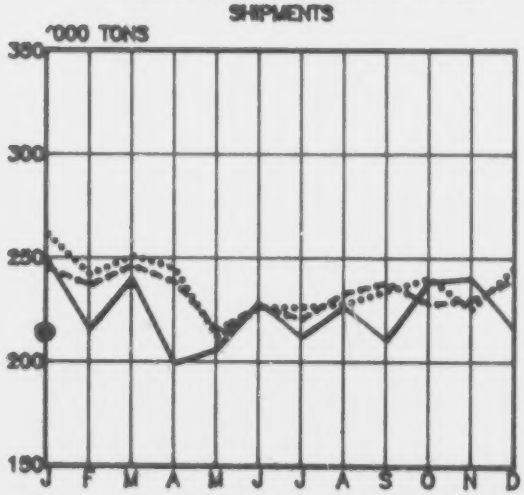
COTTON FIBER PAPER

SHIPMENTS



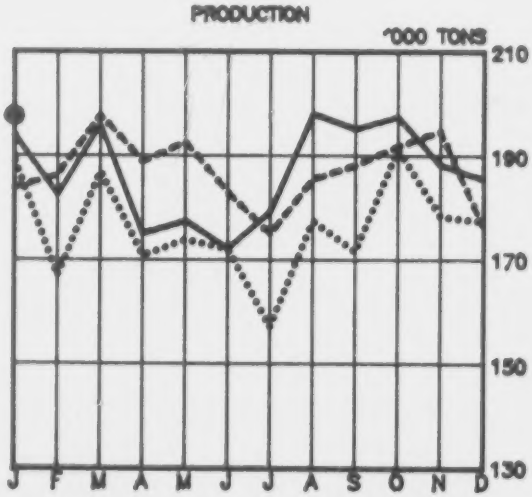
UNBLEACHED KRAFT PACKAGING AND INDUSTRIAL CONVERTING PAPER

SHIPMENTS



OTHER PAPER

PRODUCTION



1987 ..... 1988 ----- 1989 ——— Jan 1990 ●

WOOD PULP STATISTICS
(Thousands of Tons)

	YEAR 1987	YEAR 1988	SEPTEMBER 1989	OCTOBER 1989	NOVEMBER 1989	DECEMBER 1989	Annual Rate Y-T-D 1989	% Change from same Period Last Year
TOTAL WOOD PULP					R	P		
Total Wood Pulp - Production	59,552	61,161	5,063	5,295	5,021	4,969	62,023	1.4
- Imports	4,858	5,038 A	428	442	388	398	5,005	-0.7
- Exports	4,889	5,528	548	502	347	585	6,231	12.7
- New Supply	59,513	60,671	4,944	5,234	5,062	4,783	60,797	0.2
Dissolving Pulp - Production	1,312	1,367	128	109	133	117	1,427	4.4
- Imports	198	248	27	34	11	21	284	14.3
- Exports	752	865	61	67	53	90	836	-3.3
- New Supply	757	751	95	76	90	48	875	16.5
Paper Grades - Production	48,293	49,493	4,069	4,277	4,032	3,973	50,194	1.4
Chemical Pulp - Imports	4,456	4,419 A	365	378	338	343	4,370	-1.1
- Exports	4,111	4,612	484	432	290	490	5,325	15.5
- New Supply	48,637	49,300	3,951	4,223	4,079	3,826	49,239	-0.1
Groundwood and - Production	5,702	5,943	505	530	505	523	6,032	1.5
Thermo-Mech. - Imports	197	371 A	36	30	39	34	351	-5.5
- Exports	26	51	3	3	3	5	70	37.5
- New Supply	5,872	6,263	538	556	541	552	6,313	0.8
Semi-Chemical - Production	4,246	4,358	361	379	351	357	4,370	0.3
- Imports								
- Exports								
- New Supply	4,246	4,358	361	379	351	357	4,370	0.3
MARKET WOOD PULP								
Total Market - Production	8,114	8,565	712	682	691	648	8,664	1.2
Wood Pulp - Imports	3,235	3,471	292	290	251	282	3,340	-3.8
- Exports	4,820	5,071	439	396	318	501	5,309	4.7
- New Supply	6,529	6,966	565	576	624	429	6,694	-3.9
Dissolving Pulp - Production	1,308	1,365	127	109	132	117	1,422	4.1
- Imports	154	206	21	24	8	17	210	1.7
- Exports	775	798	76	63	48	94	823	3.2
- New Supply	687	774	73	70	92	39	809	4.5
Paper Grades - Production	6,806	7,200	585	573	558	531	7,242	0.6
Chemical Pulp - Imports	2,975	3,126	265	264	233	261	3,072	-1.7
- Exports	4,045	4,273	363	333	269	407	4,486	5.0
- New Supply	5,736	6,052	487	504	522	386	5,828	-3.7
Groundwood Pulp - Production	0	0	0	0	0	0	0	0.0
and All Other - Imports RS	106	139	5	2	10	3	58	-58.2
- Exports	0	0	0	0	0	0	0	0.0
- New Supply	106	139	5	2	10	3	58	-58.2

SOURCES: Total Wood Pulp Production & Market Wood Pulp Production, Imports & Exports - Pulp Division, Pulp, Materials and Technology Group, API. Total Wood Pulp Imports & Exports - Department of Commerce.
NOTE: A - API shifted Import data from January 1989 to December 1988 to compensate for misallocation of reported data.

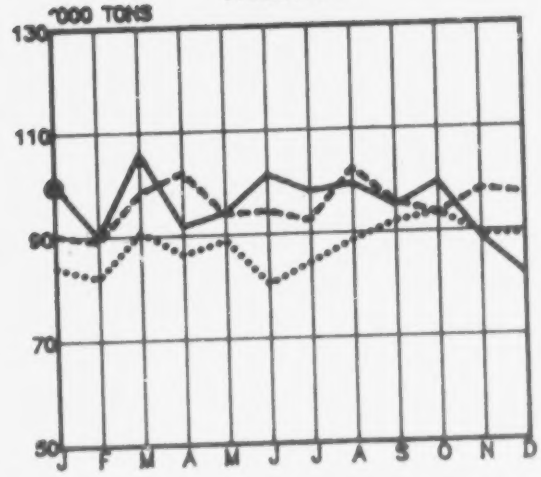
FIBROUS RAW MATERIALS
(Thousands of tons)

	YEAR 1987	YEAR 1988	SEPTEMBER 1989	OCTOBER 1989	NOVEMBER 1989	DECEMBER 1989	Annual Rate Y-T-D 1989	% Change from same Period Last Year
CONSUMPTION AT PAPER & PAPERBOARD MILLS					R	P		
Total	77,467	79,868	6,666	7,070	6,652	6,561	81,303	1.8
Total Wood Pulp	59,474	60,847	4,997	5,311	4,979	4,968	61,309	0.8
Waste Paper	17,993	19,021	1,669	1,760	1,674	1,593	19,994	5.1
INVENTORIES								
Chemical Paper Grade Market Pulp								
Producers' Own-Use Inventories	170	172	205	187	188	193	193	12.2
Producers' Market Inventories	224	261	364	382	446	343	343	31.4
Consumers' Purchased Inventories #	529	622	590	551	529	519	519	-16.5
Waste Paper at Paper & Bd. Mills	903	1,044	1,083	1,082	1,111	1,093	1,093	4.8
Days of Supply at Pulp Mills of Chemical Paper Grade Mkt Pulp	12	14	19	20	25	19	19	35.7

SOURCES: Wood Pulp Data, Pulp Division, Pulp, Materials and Technology Group, API. Waste Paper Data, Paper Recycling Committee, API. # Includes all grades of wood pulp.
P - Preliminary; R - Revised; (0) - Indicates zero to five-hundred short tons RS - 1988 Revised Series

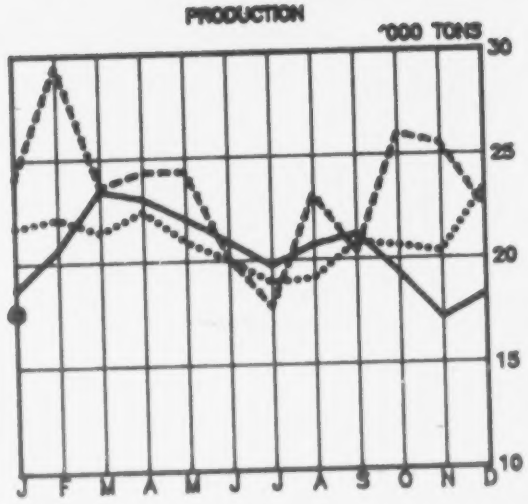
BLEACHED BRISTOLS

PRODUCTION



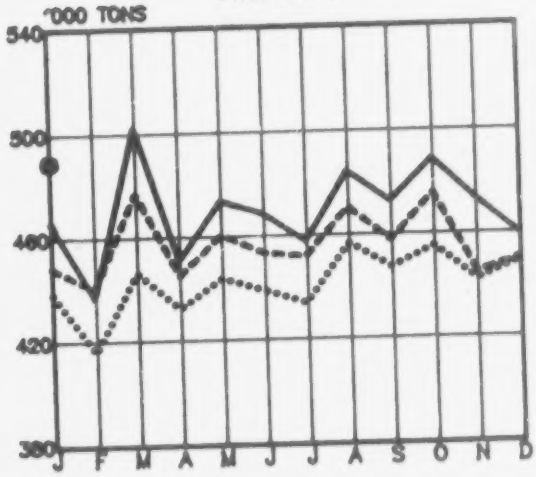
THIN PAPER

PRODUCTION



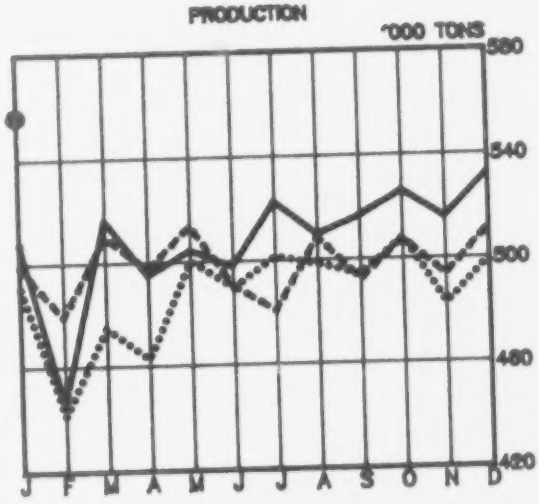
TISSUE PAPER

PRODUCTION



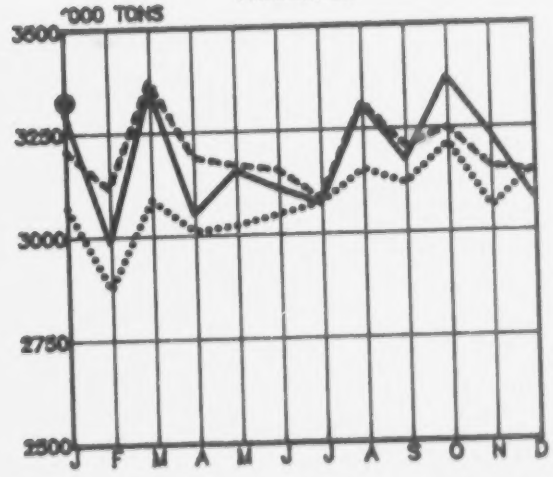
NEWSPRINT

PRODUCTION



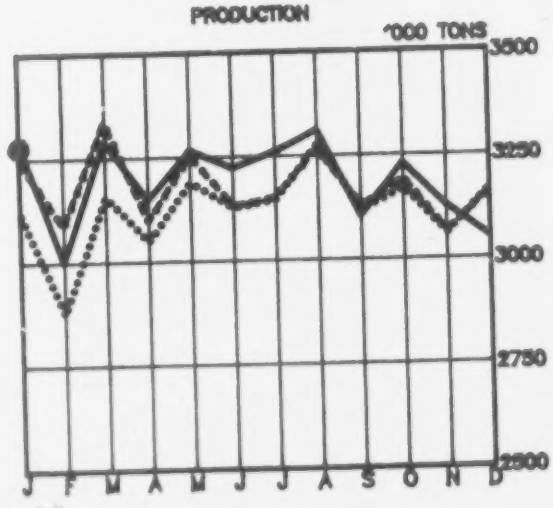
TOTAL PAPER

PRODUCTION



TOTAL PAPERBOARD

PRODUCTION



1987 ..... 1988 ------1989 ——— Jan 1990 ●

F I B R O U S R A W M A T E R I A L S

(Thousands of Standard (128 cubic foot) Cords)

		YEAR 1987	YEAR 1988	SEPTEMBER 1989	OCTOBER 1989	NOVEMBER 1989	DECEMBER 1989	Annual Rate Y-T-D 1989	% Change From Same Period Last Year
PULPWOOD									
Total U.S.	- Total Receipts	94,312	95,537	8,491	8,876	8,202	7,844	99,279	3.9
	- Total Consumpt	93,946	95,497	8,167	8,331	8,070	7,936	98,414	3.1
	- Residues *	32,899	33,186	2,845	3,125	2,806	2,808	34,539	4.1
	- Inventories	5,096	4,888	4,891	5,405	5,581	5,462	5,462	11.7
So. Atlantic	- Total Receipts	31,147	31,582	2,804	2,801	2,609	2,474	31,982	1.3
	- Total Consumpt	30,915	31,567	2,782	2,737	2,529	2,585	32,239	2.1
	- Residues *	9,553	9,897	821	887	793	833	9,961	8.6
	- Inventories	1,211	1,200	956	956	1,037	936	936	-22.0
Northeast	- Total Receipts	6,941	7,187	585	687	558	596	7,242	0.8
	- Total Consumpt	7,109	7,216	583	603	563	538	7,072	-2.0
	- Residues *	1,543	1,664	126	132	118	108	1,575	-5.3
	- Inventories	594	572	444	499	475	522	522	-8.7
South Central	- Total Receipts	33,650	33,751	3,119	3,286	3,097	2,788	35,840	6.2
	- Total Consumpt	33,059	33,646	3,020	3,006	3,068	2,891	35,791	6.4
	- Residues *	9,992	9,890	884	988	946	844	10,539	6.6
	- Inventories	1,294	1,160	1,055	1,398	1,434	1,336	1,336	15.2
North Central	- Total Receipts	6,552	6,865	602	624	568	581	7,020	2.3
	- Total Consumpt	6,764	6,929	531	592	602	561	6,963	0.5
	- Residues *	1,263	1,334	116	132	138	126	1,422	6.6
	- Inventories	830	839	899	945	909	938	938	11.8
West	- Total Receipts	16,022	16,152	1,381	1,478	1,370	1,405	17,195	6.5
	- Total Consumpt	16,099	16,139	1,251	1,393	1,388	1,361	16,349	1.3
	- Residues *	10,548	10,401	898	986	811	897	11,042	6.2
	- Inventories	1,167	1,117	1,537	1,607	1,726	1,730	1,730	54.9

* - Consumption of Residues in Cord Equivalents. SOURCE: American Pulpwood Association

U N I T E D S T A T E S T R A D E W I T H C A N A D A

IMPORTS FROM CANADA *

		YEAR Tons	1988 ($000's)	NOVEMBER 1989 Tons	NOVEMBER 1989 ($000)	DECEMBER 1989 Tons	DECEMBER 1989 ($000)	Annual Rate Y-T-D 1989 Tons	% Change From same Period Last Year
Pulpwood, Roundwood (in cords of 128 cubic feet)		39,337	4,195	52,191	1,028	22,552	355	211,061	436.5
Pulpwood chips		876,038	35,184	55,554	1,530	40,288	1,254	792,186	-9.6
Wood Pulp, Total	A	4,340,245	2,282,329	354,385	213,996	333,815	199,776	4,353,343	8.3
Waste Fibrous Materials, Total		227,004	48,450	11,497	2,406	12,319	2,214	164,217	-27.7
Paper, Board & Products, Total	A	10,756,385	5,861,382	937,708	519,955	879,584	475,464	10,986,831	4.7
Paper, Paperboard,Wet Machine Bd. & Constr. Paper & Bd.	A	10,625,309	5,619,996	926,405	493,210	870,851	454,689	10,807,659	4.8
Paper, Paperboard & Products	A	10,542,477	5,795,583	924,094	516,342	872,089	473,515	10,830,545	5.1
Paper & Paperboard, Only	A	10,411,401	5,554,197	912,791	489,597	862,957	452,739	10,651,373	4.7
Paper, Total	A	10,146,285	5,457,707	879,148	476,816	831,525	441,383	10,234,256	3.3
Newsprint	R A	8,494,709	4,427,893	708,781	361,694	668,936	332,060	8,330,874	N.C.
Printing, Writing & Rel. Pap.	RSA	1,371,035	861,347	138,914	92,797	134,025	89,204	1,579,698	17.3
Pack. & Ind. Conv. Paper		227,493	120,765	20,191	10,944	18,774	10,406	217,159	-4.5
Special Industrial Paper		4,767	9,106	5,436	6,241	4,537	4,956	49,045	928.8
Tissue Paper		48,281	38,596	5,826	5,140	5,253	4,758	57,481	19.1
Paperboard, Total		265,116	96,490	33,643	12,781	31,432	11,357	417,117	57.3
Convtd Paper&Paperbd Products	RS	131,076	241,387	11,303	26,745	9,133	20,775	179,172	36.7
Wet Machine Board		2,939	2,120	62	52	23	22	293	-90.8
Construction Paper & Board		210,970	63,679	13,552	3,561	7,471	1,928	155,993	-26.1

NOTE: A - API shifted Import data from January 1989 to December 1988 to compensate for misallocation of reported data.

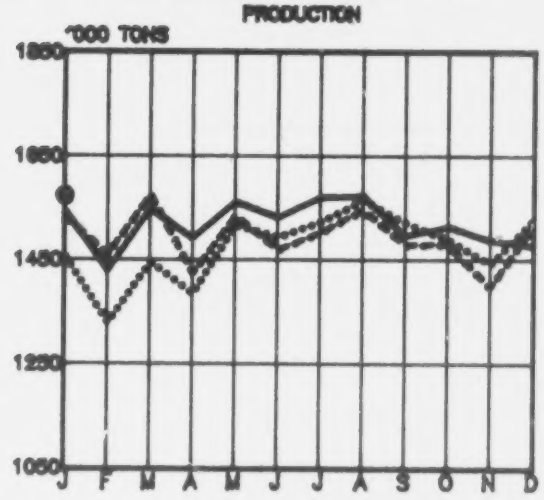
EXPORTS TO CANADA *

Pulpwood, Roundwood (in cords of 128 cubic feet)		14,180	836	996	92	0	0	62,892	343.5
Pulpwood chips		33,040	1,739	1,110	51	524	24	28,218	-14.6
Wood Pulp, Total		280,074	101,214	13,346	5,568	35,794	13,911	352,896	26.0
Cotton Pulp & Other Pulp		84,891	24,062	508	382	523	424	6,215	-92.7
Waste Paper		331,999	38,199	11,468	1,649	23,499	3,478	284,379	-14.3
Paper, Board & Products, Total		1,050,117	715,960	86,335	54,000	86,525	58,917	1,083,228	3.2
Paper, Paperboard,Wet Machine Bd. & Constr. Paper & Bd.		773,973	464,416	61,471	36,029	61,172	38,365	754,575	-2.5
Paper, Paperboard & Products		1,013,157	699,127	85,691	53,722	84,752	58,329	1,062,560	4.9
Paper & Paperboard, Only		737,013	447,583	60,826	35,751	59,399	37,777	733,907	-0.4
Paper, Total		340,156	293,175	35,718	26,859	30,713	26,250	371,206	9.1
Newsprint		5,806	5,304	349	222	625	401	8,316	43.2
Printing, Writing & Rel. Pap.	R	166,667	160,007	23,123	19,057	18,371	18,161	228,021	36.8
Pack. & Ind. Conv. Paper		41,718	29,572	7,716	2,934	6,761	2,705	65,390	56.7
Special Industrial Paper		118,806	90,276	4,231	4,104	4,475	4,169	62,645	-47.3
Tissue Paper		7,160	8,016	298	541	482	815	6,834	-4.6
Paperboard, Total		396,857	154,408	25,108	8,892	28,686	11,527	362,701	-8.6
Convtd Paper&Paperbd Products	R	276,145	251,544	24,865	17,971	25,353	20,552	328,653	19.0
Wet Machine Board		6,527	2,590	7	3	30	20	1,628	-75.1
Construction Paper & Board		30,433	14,243	637	276	1,743	568	19,040	-37.4

SOURCE: Bureau of Census, Department of Commerce . E - Estimate of tonnage based on square foot data RS - Revised Series
* 1989 Import/Export codes revised to Harmonized System. Detail may not always be comparable to 1988. NC - Not Comparable
R - API Revised grade distribution for 1989.

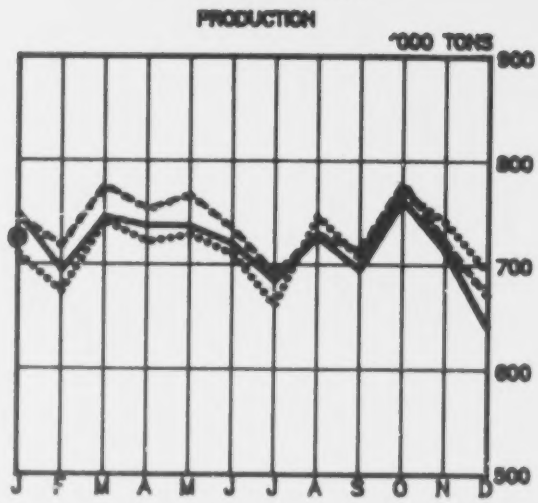
UNBLEACHED KRAFT LINERBOARD

PRODUCTION



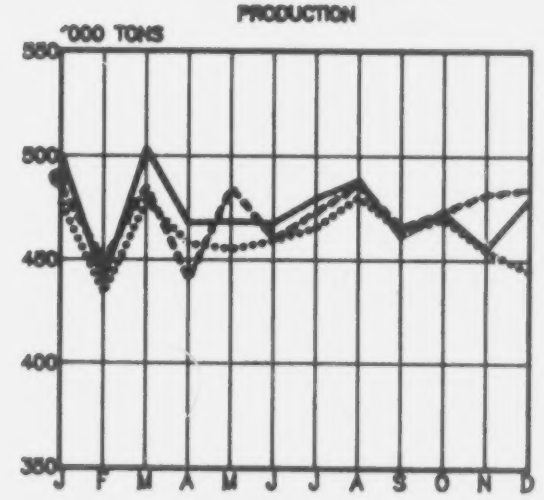
RECYCLED PAPERBOARD

PRODUCTION



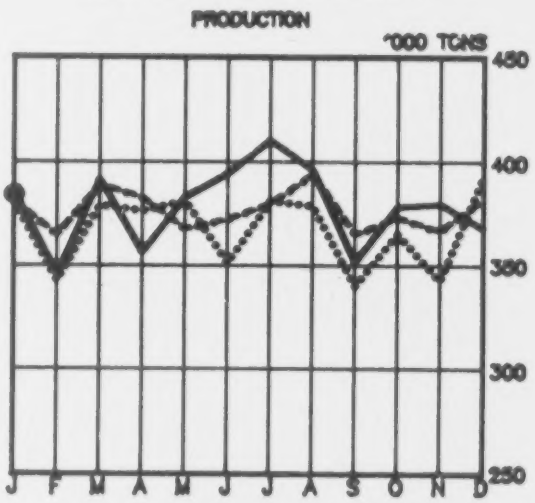
SEMICHEMICAL PAPERBOARD

PRODUCTION



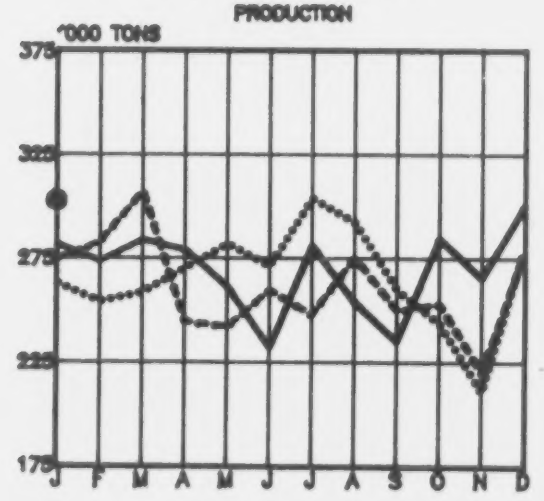
SOLID BLEACHED PAPERBOARD

PRODUCTION



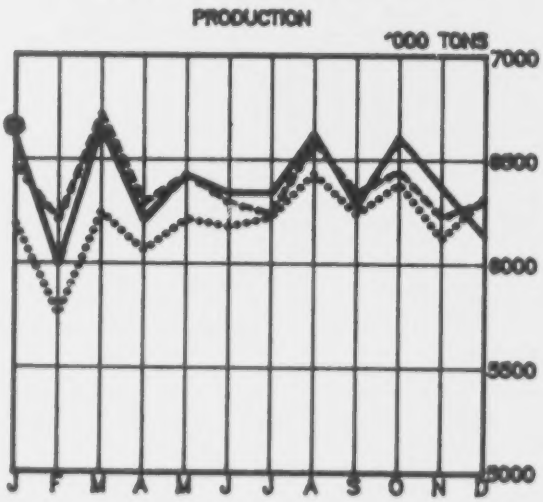
PAPERBOARD FOR EXPORT

PRODUCTION



TOTAL PAPER AND PAPERBOARD

PRODUCTION



1987 ..... 1988 - - - - - 1989 ——— Jan 1990 ●

I M P O R T S *

		YEAR 1988 Tons	YEAR 1988 $000	1989 NOVEMBER Tons	1989 NOVEMBER $000	1989 DECEMBER Tons	1989 DECEMBER $000	(1) Annual Rate YTD 1989 Tons	% Change from same Period Last Year
Pulpwood Roundwood (cords)		39,515	4,200	52,191	1,028	22,552	355	211,061	434.1
Pulpwood Chips		888,636	35,553	55,576	1,533	40,310	1,258	805,361	-9.4
Total All Imports	A	18,402,259	10,725,164	1,514,760	956,254	1,425,379	869,252	18,288,860	-0.6
Wood Pulp Total	A	5,038,158	2,663,424	387,620	234,786	398,459	239,778	5,005,100	-0.7
Waste Paper		161,367	27,361	11,473	2,339	12,172	2,137	172,575	6.9
Other Fibrous Materials		92,505	32,331	664	354	243	159	11,254	-87.8
Paper Board & Products Total	A	13,110,229	8,002,047	1,115,003	718,775	1,014,506	627,178	13,099,930	-0.1
Paper Paperboard Wet Machine Bd. & Construction Paper & Board	A	12,727,246	7,838,168	1,078,817	624,587	977,655	545,826	12,537,474	-1.5
Paper Ppbd & Prds ex Cnst&WMB	A	12,787,784	7,893,637	1,099,945	714,430	1,006,038	624,753	12,910,205	1.0
Paper & Paperboard Only	A	12,404,801	6,929,757	1,063,759	620,243	969,178	543,405	12,347,748	-0.5
Paper Total	A	12,063,798	6,799,044	1,023,128	599,997	931,661	526,223	11,814,263	-2.1
Newsprint	R A	8,801,503	4,569,853	719,577	367,263	688,629	340,938	8,553,401	N.C.
Printing & Writing	A	2,859,530	1,948,906	251,666	181,836	197,131	142,039	2,732,978	-4.4
Uncoated Groundwood	R	1,362,642	792,881	118,822	74,927	83,799	51,226	1,384,114	N.C.
Coated Print.& Impreg. Pap.	A	797,765	641,466	78,269	57,962	55,955	45,483	774,822	-3.0
Uncoated Free Sheet	A	591,830	414,326	56,194	48,964	51,206	37,968	583,877	-1.5
Uncoated Book	A	258,146	175,746	N.L.R.	N.L.R.	N.L.R.	N.L.R.	N.L.R.	N.L.R.
Writing and Similar Paper	A	333,683	238,580	56,194	48,964	51,206	37,968	583,877	74.7
Thin (except Cigarette)	R	55,774	48,804	1,276	1,714	1,333	1,511	12,711	-77.2
Bristols	RS	51,519	51,430	5,106	6,270	4,838	5,851	59,852	14.6
Total Pkg & Other Paper		343,196	231,796	48,262	48,226	36,155	34,143	487,887	18.6
Unbleached Kraft Paper		161,708	76,116	22,585	11,888	21,138	10,886	239,303	48.8
Other Pkg. & Indust. Paper		181,488	155,680	17,677	29,226	15,025	24,057	167,785	-7.6
Tissue		59,561	48,488	11,614	10,671	9,746	9,102	120,797	102.8
Paperboard, Total		341,911	130,714	48,639	28,246	37,517	17,182	533,485	56.4
Test or Containerboard		85,682	36,145	5,827	2,678	7,926	3,227	85,848	-8.7
Semi-Chemical Corrugating		142,498	43,596	6,875	1,983	8,552	2,541	118,176	-17.1
Other Paperboard		112,839	50,972	27,938	15,585	21,040	11,415	330,261	192.7
Convtd Paper&Paperbd Products		382,983	963,880	36,186	94,187	36,851	81,352	562,457	46.9
Paper Products, Total	RS	345,817	895,813	29,305	79,939	31,280	70,297	478,471	36.0
Paperboard Products, Total		37,166	68,067	6,881	14,248	5,572	11,055	91,986	147.5
Wet machine Board		4,239	3,780	106	93	37	41	606	-85.7
Construction Paper & Board		318,206	184,630	14,952	4,251	8,440	2,380	189,119	-40.6
Notes									
Other: No Weight Avail. ($000)			177,686		10,537		8,452	136,624	-23.1
Total Imports Incl. Other($000)			10,902,850		966,791		877,703	11,488,887	5.4

NOTE: A - API shifted Import data from January 1989 to December 1988 to compensate for misallocation of reported data.
RS - 1988 data revised to conform with 1989 codes. R - API revised grade distribution for 1989.

E X P O R T S

		YEAR 1988 Tons	YEAR 1988 $000	1989 NOVEMBER Tons	1989 NOVEMBER $000	1989 DECEMBER Tons	1989 DECEMBER $000	(1) Annual Rate YTD 1989 Tons	% Change from same Period Last Year
Pulpwood, Roundwood (cords)		15,470	894	5,317	699	3,755	49	137,617	789.6
Pulpwood Chips		3,503,100	286,191	271,389	28,412	382,994	38,533	4,357,811	24.4
Total All Exports		17,061,208	7,467,363	1,289,634	578,979	1,591,359	738,257	18,633,674	9.2
Wood Pulp,Total		5,528,292	2,914,521	346,645	195,928	584,592	328,436	6,731,172	12.7
Cotton Pulp and Other Pulp		201,567	111,923	8,251	6,989	13,145	8,940	122,045	-39.5
Waste and Old Paper		5,640,118	688,258	458,108	56,718	478,737	57,792	5,980,620	6.0
Paper, Board & Products,Total		5,691,231	3,752,661	476,630	319,344	514,886	343,088	6,299,837	10.7
Paper,Paperboard,Wet Machine Bd. & Construction Paper & Board		4,876,563	2,701,405	399,020	221,575	436,768	242,387	5,259,802	7.9
Paper, Ppbd & Prod ex Cnst&WMB		5,559,356	3,683,601	474,949	318,550	511,369	341,701	6,263,560	12.7
Paper & Paperboard, Only		4,744,688	2,632,346	397,338	220,780	433,251	241,001	5,223,525	10.1
Paper, Total		1,102,490	988,031	114,051	90,422	103,115	86,518	1,465,821	33.0
Newsprint		427,296	295,474	46,100	25,391	34,670	19,450	624,798	46.2
Printing & Writing		287,288	313,047	41,349	37,205	38,845	37,638	478,270	N.C.
Uncoated Groundwood		70,286	58,639	5,503	4,418	6,739	4,597	88,056	25.3
Clay Coated Paper		97,464	79,731	14,770	12,237	14,575	11,931	168,538	72.9
Uncoated Free Sheet	R	82,650	124,049	13,478	13,580	11,487	14,320	122,346	48.0
Other Printing & Writing	R	36,799	50,629	7,598	6,970	6,045	6,790	99,329	N.C.
Total Pkg. & Other Paper		346,718	342,117	25,617	26,202	28,296	27,336	342,041	-1.3
Unbleached Kraft		110,075	54,975	8,768	4,790	12,904	5,484	125,818	14.3
Other Pkg. & Indust. Paper		236,643	287,142	16,849	21,412	15,393	21,853	216,223	-8.6
Tissue		41,268	37,393	985	1,624	1,295	2,093	20,712	-49.8
Paperboard, Total		3,642,198	1,644,314	283,287	130,358	330,136	154,483	3,757,704	3.2
Solid Wood Pulp		3,359,078	1,511,057	267,632	122,802	318,603	148,491	3,572,758	6.4
Total Linerboard		2,281,362	887,846	181,429	65,790	225,826	82,544	2,499,716	9.6
Bleached Kraft Linerboard		140,801	73,728	24,514	10,843	27,781	12,721	283,113	101.1
Unbleached Kraft Linerbd		2,140,562	814,119	156,915	54,946	197,245	69,823	2,216,603	3.6
Other Unbleached Kraft		292,437	102,638	22,243	8,185	15,794	8,104	246,575	-15.7
Other Bleached Kraft		742,918	502,513	61,606	47,948	74,878	56,805	795,305	7.1
Semi-Chemical Corrugating		42,360	18,060	2,355	879	2,905	1,039	31,162	-26.4
Recycled Paperboard		283,121	133,257	15,655	7,556	11,534	5,992	184,947	-34.7
Convtd Paper&Paperbd Products		814,668	1,051,256	77,611	97,770	78,118	100,701	1,040,035	27.7
Paper Products, Total	R	367,548	682,281	30,612	61,114	35,810	66,712	473,435	28.8
Paperboard Products, Total		447,121	368,975	46,999	36,656	42,309	33,989	566,601	26.7
Wet Machine Board		11,691	4,915	54	20	139	75	2,889	-75.3
Construction Paper & Board E		128,184	64,145	1,628	774	3,378	1,312	33,388	-72.2
Notes									
Other: No Weight Avail. ($000)			9,170		2,144		1,790	23,665	158.1
Total Exports Incl. Other($000)			7,476,533		581,123		740,047	8,627,898	15.4

SOURCE: Bureau of Census, U.S. Department of Commerce. E - Incl. estim. of tonnage based on square foot data.
(1) Annual Rate Year-To-Date is in tons unless otherwise specified in item description. N.L.R. - No longer reported.
* 1989 Import/Export data based on Harmonized System codes. Detail may not always be comparable to 1988. N.C. - Not Comparable

PRODUCER PRICE INDEXES
1982 = 100

	1988	1989	OCTOBER 1989	NOVEMBER 1989	DECEMBER 1989	JANUARY 1990	Annual Rate Y-T-D 1990	% Change from same Period Last Year
Pulp, Paper and Products except Building Grades	124.8	132.4	133.6	133.6	133.5	133.4	133.4	3.0
Pulp Paper & Products, ex. Building Grades & ex Waste Paper *	123.8	132.0	133.2	133.3	133.2	133.1	133.1	3.2
Total Wood Pulp	136.7	157.5	160.8	160.6	159.4	159.8	159.8	5.5
Total Paper	123.2	129.6	128.6	128.2	128.2	128.0	128.0	-0.5
Total Paper, exc. Newsprint	123.4	130.6	129.3	128.8	128.7	128.4	128.4	-1.1
Newsprint	127.6	122.4	118.8	118.6	117.8	117.9	117.9	-6.8
Total Paperboard	133.2	140.1	140.0	139.7	139.6	138.8	138.8	0.8
Total Paper and Paperboard *	126.4	132.9	132.2	131.8	131.8	131.4	131.4	-0.1
Converted Products	123.0	131.7	134.0	134.5	134.5	134.5	134.5	5.4
Waste Paper	183.6	157.1	158.3	152.5	151.4	151.4	151.4	-3.8
All Commodities	106.9	112.2	112.7	112.7	113.0	114.9	114.9	4.0
Industrial Commodities	106.3	111.6	112.4	112.2	112.3	114.2	114.2	4.2

SOURCE: Producer Price Indexes: Bureau of Labor Statistics, U.S. Department of Labor * Computed by API

Paper and Allied Products Companies

Sales and Earnings

	Sales			Net Profit After Taxes			Net Profits/Sales	
	1989	1988	89/88	1989	1988	89/88	1989	1988
	(Thousand Dollars)		%	(Thousand Dollars)		%	%	%
		25	Paper and Allied Products Companies					
First Quarter	17,247,422	15,478,983	11.4	1,385,468	1,160,445	19.4	8.03	7.50
Second Quarter	18,300,414	16,006,645	14.3	1,384,826	1,304,442	6.1	7.57	8.15
Third Quarter	18,023,162	16,446,298	9.6	1,412,779	1,531,561	-7.8	7.84	9.31
Fourth Quarter	18,205,800	16,857,752	8.0	1,220,346	1,400,975	-12.9	6.70	8.31
Year-to-date	71,776,798	64,789,678	10.8	5,403,219	5,397,423	0.1	7.53	8.33
		4	Forest Product Companies					
First Quarter	5,382,803	4,781,531	12.6	351,437	256,957	36.8	6.53	5.37
Second Quarter	5,971,615	5,463,237	9.3	386,418	314,540	22.9	6.47	5.76
Third Quarter	5,892,583	4,967,155	18.6	409,560	304,091	34.7	6.95	6.12
Fourth Quarter	5,657,875	5,717,280	-1.0	90,906	323,620	-71.9	1.61	5.66
Year-to-date	22,904,876	20,929,203	9.4	1,238,321	1,199,208	3.3	5.41	5.73

Imports of waste paper in 1989 were 179,000 tons. Total waste paper recovery amounted to 27.5 million tons, equivalent to 32.4% of the new supply of paper and board.

WOOD PULP

Chemical paper grade market wood pulp production in January 1990, at 657,000 short tons, was equal to its year-ago total and 9% above the 1989 monthly average. Producers added 175,000 tons of these grades of wood pulp to their inventories in January and shipments fell to 482,000 tons, 15% below their January 1989 level and 19% below the average rate for all of 1989. Exports bore the brunt of the January decline, falling by 144,000 tons -- 35.5%. Declines were evident in all markets, with shipments to Western Europe off 27% and shipments to Japan down 33%. Shipments to the domestic market fell 3.4% from January 1989 to January 1990.

SALES AND EARNINGS

Sales for the 25 paper and allied products companies reported in the press in 1989, which accounted for about 64% of the industry total, were 11% above their year-ago total, while after-tax earnings matched their year-ago rate. These companies generally turn in a stronger performance than the industry as a whole. Census reports for the first three quarters of 1989, as presented on the Industry Data Sheet that accompanies this report, show sales for all paper and allied products companies up 4.6%, after-tax profits down 5.2%; changes for all paper and allied products companies for the full year 1989 should be fairly close to these rates. The aggregated data for these 25 companies are shown on the bottom of page 10, together with data on the four lumber and wood products companies that have pulp and paper capacity.

INDUSTRY DATA SHEET -- LONG TERM

The table on page 12 presents annual data on various industry and market data series reported in the Industry Data Sheet that accompanies this report for selected years from 1979 to 1989, to provide an historical perspective.

INDUSTRY DATA

	1979	1984	1985	1986	1987	1988	1989
PAPER AND PAPERBOARD -- Tons (000)							
Total Production (API).....: excluding :	61,071	66,466	66,958	70,875	74,318	76,467	76,488
Imports (including Products).. wet :	8,736	10,576	11,106	11,597	12,528	12,788	12,910
Exports (including Products).: machine :	3,610	4,310	4,003	4,593	5,197	5,569	6,267
Apparent Consumption.....: grades :	66,199	74,734	74,061	77,879	81,649	83,686	83,135
Paper Production % Tonnage Capacity	95.1	92.9	90.6	93.4	94.4	95.4	92.4
Paperboard Production % Tonnage Capacity	93.9	94.5	89.7	93.6	95.7	94.5	93.1
IMPORTS.....:Including Construction and :	9,123	11,075	11,521	11,936	12,837	13,110	13,100
EXPORTS.....: WMB Grades (excl. HPB) :	3,672	4,387	4,071	4,667	5,304	5,691	6,300
MARKET WOOD PULP PRODUCTION - Tons (000)	5,678	8,899	8,800	7,573	8,114	8,565	8,664
TOTAL WOOD PULP PRODUCTION - Tons (000)	49,386	55,471	54,147	57,006	59,552	61,161	62,023
WOOD PULP IMPORTS - Tons (000)	4,318	4,480	4,466	4,582	4,850	5,036	5,006
WOOD PULP EXPORTS - Tons (000)	2,935	3,594	3,791	4,456	4,569	5,528	6,231
RAW MATERIALS CONSUMPTION - Tons (000)							
..PAPER AND BOARD MILLS : excluding :							
Wood Pulp.....:consumption for:	48,939	54,994	53,683	57,061	59,474	60,847	61,309
Waste Paper.....:construction & :	13,726	15,926	15,734	17,268	17,993	19,021	19,994
TOTAL.....: WMB grades :	62,665	70,920	69,417	74,329	77,467	79,868	81,303
PULPWOOD CONSUMPTION Cords(000)Amer.Pulpwd.Assn	79,556	87,646	85,744	91,434	93,946	95,497	96,414
EMPLOYMENT (000)							
Paper and Allied Products.....Total	706.8	680.9	677.7	673.7	680.1	692.6	697.3
Pulp, Paper and Board Mills.....Total	271.4	257.2	252.3	248.1	244.9	245.5	247.2
AVG. HOURLY EARN'S OF PRODUCTION WORKERS ($)							
Paper and Allied Products	7.13	10.41	10.83	11.18	11.43	11.86	11.93
Pulp, Paper Mills	8.26	12.43	13.14	13.63	14.01	14.31	14.71
Paperboard Mills	8.38	12.99	13.60	13.98	14.30	14.49	14.76
CAPITAL EXPENDITURES, PAPER & ALLIED PRODUCTS (Rept. by US Dept. of Com., Ann. Rates, Bill.$)*	5.24	7.21	8.59	8.77	9.01	11.36	15.45
INDEX OF OUTPUT PER MAN-HOUR (1977=100)							
:IN PULP, PAPER :...Production Workers	106.2	123.1	126.3	136.8	144.8	148.7	149.0
:AND BOARD MILLS:...All Employees	105.4	121.0	123.1	133.5	141.6	146.1	145.5
PAPER AND ALLIED PRODUCTS (Million $)							
Industry Shipments (Dept. of Commerce)*	85,244	94,813	93,413	103,916	118,855	127,719	130,507
Pulp, Paper and Paperboard*	28,002	41,364	39,173	44,033	51,518	57,177	57,898
Inventories (End of Period) - Total Industry*..	6,936	10,128	9,906	10,429	11,264	12,088	12,560
Pulp, Paper and Paperboard*	2,377	3,822	3,628	4,115	4,266	4,326	4,969
Sales (Corporations Only)	55,359	71,891	71,466	74,544	95,576	107,221	111,873 @
Earnings (Corporations Only)	3,723	3,015	2,880	3,260	5,520	8,081	7,801 @
Depreciation (Corporations Only)	1,896	2,796	3,099	3,369	4,279	4,625	4,887 @
Net Worth (Corporations Only)	23,206	26,160	29,694	31,221	39,217	42,940	46,513 @
PRICE INDEXES (Bureau of Labor Stats)1982=100							
Pulp, Paper & Products, ex. Building Grades	80.6	107.3	106.9	107.5	114.3	124.8	132.4
Wood Pulp	82.9	104.5	91.4	94.7	111.6	136.7	157.5
Waste Paper	170.5	196.2	122.9	142.6	181.4	183.6	157.1
Paper	80.2	106.5	106.0	107.0	111.5	123.2	129.6
Paperboard	79.3	110.4	107.7	106.5	116.1	133.2	140.1
PAPER DEMAND (INDEXED: 1977=100)							
Total Paper Production *	107.1	124.3	122.8	126.0	133.0	138.4	137.7
Paper New Supply *	109.7	127.6	126.7	133.7	140.0	144.4	142.1
Demand Indicators - (Weighted Average) *	109.9	134.5	140.7	146.4	154.5	163.7	175.7
Production of Nondurable Goods *...(21.2%)	108.2	122.3	125.3	130.1	136.8	143.9	150.4
Disposable Income .....*.(23.9%)	105.0	119.5	123.0	127.8	130.0	134.9	140.7
Total Printing and Publishing *...(54.9%)	112.7	146.4	154.3	160.9	172.0	183.8	200.7
PAPERBOARD DEMAND (INDEXED: 1977=100)							
Total Paperboard Production *	108.5	117.6	114.3	121.9	129.2	131.5	132.1
Production for Domestic Use	107.4	115.4	112.5	118.7	126.2	128.6	129.2
Demand Indicators - (Weighted Average) *	106.9	118.1	120.1	121.9	125.9	132.5	137.2
Production of Consumer Goods *...(62.36%)	103.9	118.0	120.5	124.1	127.7	133.9	139.4
Production of Equipment *...(5.75%)	120.4	140.5	146.4	143.7	148.8	158.2	164.2
Production of Materials *...(32.19%)	110.3	114.2	114.5	113.8	118.3	125.3	126.1
NEWSPRINT MARKETS							
Consumption by Publishers - Tons (000)	11,242	12,603	12,773	13,156	13,563	13,597	13,563
Newspaper Pub. and Printing Empl. Total(000)	420	440	451	461	470	475	478
PRINTING AND FINE PAPER MARKETS							
MAGAZINE ADVERTISING PAGES (PIB, Inc.)	119,832	157,796	155,545	154,317	164,771	172,560	177,312
WHOLESALERS SALES AND INVENTORIES (Million $)							
Total Paper & Pap. Prdcts..,ex Wallpaper..Sales	14,916 #	33,603	36,344	38,246	44,251	52,377	56,512
Inventories (End of Period)	2,023 ##	2,993	3,339	3,577	3,744	4,436	4,396
FIBRE BOX DATA (Fibre Box Association)							
Fibre Box Shipments (Million square feet)	250,600	267,547	267,451	283,921	297,827	306,507	312,205
Container'bd Inventory at Mill & Plant(000Tons)	1,979	2,582	2,551	2,236	2,490	2,553	2,501
RETAIL TRADE (Billion $)							
Total Retail Sales *	897	1,269	1,360	1,437	1,511	1,622	1,711
Nondurable Goods Stores Sales *	590	822	862	899	950	996	1,062
GENERAL ECONOMIC DATA							
TOTAL INDUSTRIAL PRODUCTION (INDEX 1977 = 100)*	110.7	121.4	124.2	126.1	129.8	137.2	141.7
PRODUCER PRICES(ALL COMMODITIES)(IDX 1982=100)	78.7	103.7	103.2	100.2	102.8	106.9	112.2
CONSUMER PRICES (ALL ITEMS) (INDEX 1982-4=100)	72.6	103.9	107.6	109.6	113.6	118.3	124.0
TOTAL CONSUMER CREDIT OUTSTANDING - (Billion $)	298.5	453.0	531.0	586.3	623.6	671.4	729.3
GROSS NATIONAL PRODUCT - ANNUAL RATE (Billion $)							
G.N.P. or Expenditure - Current $	2,568	3,772	4,015	4,232	4,524	4,881	5,233
G.N.P. or Expenditure - 1982 $	3,192	3,501	3,619	3,718	3,864	4,024	4,144

Note: Wood Pulp prod. excl. def., explo. & sorngs. *Seas. Adj. @ First three quarters at annual rate. # Dec. 1980 Annual Rate ##Dec. 1980